1    matters for people who didn't want to learn the 800 number

2    access.  So 711 is supported and looked forward to by MCI.

3    It provides more functional equivalency for the platform

4    itself.

5              However, single-access 711 does present its own

6    set of obstacles.  It's going to increase protocol

7    negotiation time and delay call processing in states that

8    have multiple-access numbers presently.  It's going to

9    increase time to get there.

10             It's going to increase the number of instances

11   where hearing users and relay operators will be subjected to

12   TTY nasty tones directed into their ears.  So we're looking

13   at those aspects.  And it doesn't address -- three-digit 711

14   does not address a multiple-vendor environment.  It

15   considers no selection process.

16             There are voice-automated, as proposed in New York

17   and Pennsylvania, which has its own aspects and obstacles to

18   overcome.  A lot of outreach and education needs to be done

19   for the users who will have to interact with a

20   voice-response unit, and they can't hear it in the first

21   place.

22             So those things have to be taken care of, and

23   scripting would need to be standardized across the entire

24   platform.  And the FCC doesn't currently voice-intercept,

25   inbound calls, and many state contracts forbid voice

1    intercept.  So a lot of those things have to be looked at.

2              We've looked at profiling users.  We would need to

3    profile everybody user that's on or would use the platform,

4    to provide a faster access.  If you dial 711, you have a

5    profile, we recognize your ante, it would allow for much

6    faster access and connection times.  But it doesn't address

7    things like a multiple-use household where one user dialing

8    the 711 is deaf, the other user in the household needs voice

9    connection.  So we still have the negotiation time between

10   the two, and you have to look at it that way.  And it

11   doesn't address common-use phones like pay phones and PBX

12   systems.

13             Let's get on to part two here.  If we use 711 in a

14   three-digit-dialing plan, carrier of choice in a

15   multiple-vendoring environment is going to very difficult.

16   You're going to have to use some sort of testimony so

17   provide a choice to the subscriber.  If it's a voice

18   subscriber, you have many, very fast systems that can do

19   that.  A text-based subscriber would be slowed down through

20   the system, and again you have outreach and education.

21             Carrier of choice on the back end, for people who

22   want to select a different carrier for interstate or

23   intrastate phone calls is something that we do across our

24   platform today, and it's not viewed as a difficult situation

25   at all.  There are some aspects where we have to go beyond

1    the normal to get there, where you have a small,

2    long-distance provider on the other side of the state, that

3    it's common for those folks to handle, and it may not be

4    convenient for you to do, but we'll provide it.

5         Other than that, that's about it.  We're ready for

6    711.  We are ready for Bell Atlantic and in Massachusetts

7    and to provide it in any other state that's ready to do it.

8    Thank you.

9         MS. NANKIN:  Thank you.  The next speaker will be

10   Claude Stout, and he will be the last speaker this on topic.

11        MR. STOUT (through sign interpreter):  Okay.

12   Thank you, Helene.  My name is Claude Stout.  I'm the

13   executive director of Telecommunications for the Deaf, Inc.

14   On the subject of carrier of choice, Karen really hit a lot

15   of the points that TTY is pursuing, so there really is no

16   point for me to repeat those.  I would like to add certain

17   points.

18        Carrier of choice is already complicated by

19   itself, as Karen already pretty much already explained.

20   Those of us that are deaf or hard of hearing or lay deafing,

21   deaf-blind, compared to people without disabilities, we are

22   entitled to have various access choices as to how we use

23   carrier of choice.  It should be up to us.  We don't want to

24   be at the mercy of the system.  We want the system to fit

25   our needs, not the other way around.

1            It's very important that when we want to have

2    carrier of choice that we have the preference on a

3    presubscribed basis or on a call-by-call basis or whether we

4    use one that we stick with over a certain period of time,

5    stick with our long-distance carrier.  Those choices should

6    be made by us, and they should not be limited.  They should

7    be more various.

8            My section and last point that I want to stress is

9    that the complexity behind the carrier of choice requires

10   intensive outreach, intensive and pervasive outreach,

11   whether it be activities in programs on what have each state

12   at their TRS relay administrators and those programs.

13           Each state has the responsibility to work with the

14   TRS providers to do good outreach and provide such programs

15   for deaf and hard of hearing, lay deafing, and deaf-blind

16   individuals.  They all deserve constant education own how

17   they can use carrier of choice, and that issue still remains

18   to be a complex issue.  They are afraid to use it.  They

19   don't know, but if we educate them and explain to them how

20   it works and broadcast information on televisions and so

21   forth, they will understand what it means to use carrier of

22   choice.  And that's basically it for my comments.  Thank

23   you.

24           MS. NANKIN:  Thank you, Claude.  We will now go to

25   the third topic, which will be 711 access to commercial

1    mobile-radio services, and Paul Ludwick will make this

2    presentation.

3              MR. LUDWICK:  Thank you, Helene.  My name is Paul

4    Ludwick.  I'm product manager for Sprint's relay drive.

5    When I came here today, I think I misunderstood the format a

6    little bit.  I thought we were going to get a chance to

7    speak on all of the topics rather than one selected.

8              MS. NANKIN:  Let me interrupt for one second, if

9    you will.

10             MR. LUDWICK:  Okay.

11             MS. NANKIN:  And the way that you will do that is

12   after we complete this -- after you make your presentation,

13   we will open it up for comments and views and questions on

14   each of the topics in turn, so you will.

15             MR. LUDWICK:  This is going to be short, because

16   this is the one topic that I know the least about.  In terms

17   of implementing 711 on a cellular packet data number, I

18   think the carriers, the CMRS carriers face similar

19   challenges to those that are faced be the local exchange

20   networks -- Where to put the functionality, which layer do

21   you put that in?  As Rich stated, you put it up in the

22   higher level, for the intelligent network.  You push it down

23   to the bottom level where the physical switches reside.  I

24   think that's a question that needs to be answered there.

25             I think the CMRS carriers also face some unique

1    challenges, and those are mainly related to their

2    footprints.  Whereas most of the operating companies have

3    regionalized services, the cellular companies are more

4    nationwide in nature.  What they tend to follow is

5    geographic and population patterns of the country.  So they

6    cover a lot of area, some of it sparsely, but they cover it.

7    So they have a large area that they need to modify.

8            And I think that gives them -- it could incur a

9    cost-recovery issue with them.  If we go by Rich's number --

10    I think you mentioned that you estimated $100,000 per

11    state --  I don't know if that's realistic to think that

12    that's the same cost that would be incurred by a cellular

13    company, but I think you could probably use it as a

14    rule-of-thumb until you do the proper analysis to determine

15    the exact cost.

16            So Sprint, for example, has presence with its

17    cellular product in over 20 states.  So if we just do the

18    simple math on that, we're talking about a multimillion-

19    dollar figure.  So I think that they probably need to have

20    some guidance how they go about recouping their costs for

21    doing the implementation.

22            And one other aspect that may or may not be true

23    for an individual company may be the use of a 7-1-1 code

24    within a handset and within the switching system.  In a lot

25    of cellular systems they were implemented before 711 was

1    reserved.

2         So you can use -- the economy of the airwaves is

3    one of the things that the cellular companies try to focus

4    on, how do you get the most calls through the bandwidth that

5    they are allocated?  So a lot of them have gone to

6    abbreviated dialing tones, or some of them have gone to

7    abbreviated dialing tones, meaning, for example, if you want

8    to reach a cellular customer care organization, you may do a

9    star-two on your pad, but that's not what's sent to the

10   cellular switch.

11        In some cases that code could be 711.  So, making

12   for abbreviated-dialing purposes, they could either send the

13   full 10-digit number back, or they couldn't use an

14   abbreviated pattern that lets them send less digits and

15   ultimately use the bandwidth more efficiently.

16        So I think that's two of the major areas that they

17   have as possible handset modifications and modifications to

18   the switching pattern.  And I'm sorry, but that's the sum

19   total that I have to offer.  Thank you.

20        MS. NANKIN:  That's good.  Thank you.  Now, I'd

21   like to open the first topic, which is cost of providing 711

22   access to TRS to the panelists and see if anyone has any

23   comments, questions, wants to voice their views on what Rich

24   Ellis had said about the cost of providing 711 access to

25   TRS.

1          MR. VARMA:  My question is for Rich Ellis.  My

2     name is Yog Varma.  Rich, you mentioned earlier that voice

3     and data network platform, that it is undergoing some

4     testing in the Bell Atlantic North or United's region.  My

5     question is that my question is that the Advanced

6     Intelligent Network infrastructure and platform are pretty

7     much the same in both Bell Atlantic South and in the Bell

8     Atlantic North Region.  Why do you consider it necessary,

9     then, to have to undertake tests in the Bell Atlantic North

10    Region?

11         MR. ELLIS:  My understanding -- I'm going to turn

12    to Trish Smith over my shoulder, just to confirm this, is

13    that Bell Atlantic South, the old Bell Atlantic region, was

14    further long in the deployment process of our burden of AIN,

15    and with the merger there was a need to standardize north

16    and south, and that process was a now undertaking.  It's

17    just the standardization of the platforms between Bell

18    Atlantic's region and the old Bell Atlantic region.

19         MS. SMITH:  We'll do our testing on what's called

20    next-generation platform and AIN, which all of the AIN

21    platform in the North is on next-generation platform.  We

22    have to be assured that that's compliant and has been tested

23    in lab before we implement 711 in the North.

24         MR. VARMA:  Okay.  But I guess my question still

25    is that this underlying platform comes from the same

1  manufacturers like Lucent, Nortel, et cetera, with certainly

2  software imposed on them.  So I'm not totally clear yet on

3  why additional testing is required in the Nynex region.  Can

4  you amplify that, or did I miss your point?

5          MS. SMITH:  Well, you are correct in your

6  perception that we are using the same switches.  There are

7  two platforms out there though, current generation and next

8  generation platform, and the next-generation platform, if

9  I'm remembering correctly, involves a certain version of the

10  ISCP.  So we have to make sure that everything meshes

11  together and is working on the next-generation platform

12  before we turn things up in Bell Atlantic North.  Does that

13  answer your question?

14          MR. VARMA:  I think it does.  Let me just follow

15  that up, though.  In your written comments you have

16  indicated that you are ready to move forward rather quickly

17  in implementing 711 not only in Pennsylvania and New Jersey,

18  but also in D.C., in Virginia, and West Virginia.  You also

19  mentioned Maine, Vermont, and Rhode Island, which are some

20  of the Bell Atlantic North states.

21          You did not mention anything about the States of

22  New York, Massachusetts, or New Hampshire.  And I was

23  wondering if you can amplify on your written comments and

24  give us some idea as to when you might be able to move

25  forward on 711 in the States of New York, Massachusetts, and

1    New Hampshire.

2            MR. ELLIS:  Those states will all be ready to go

3    from our perspective, at the end of this year, early next

4    year.  The other piece of the puzzle, however, is that the

5    relay center has to be ready on their end.

6            Maryland was an easy state to implement relatively

7    speaking because, first of all, there was only one other

8    telecommunications carrier in Maryland.  Maryland already

9    had 10-digit dialing, which means there will be fewer

10   misdialed calls with 711, so it's just an easier process.

11   And also they were using the single number for voice and

12   text users already.

13           The other states in Bell Atlantic use straight

14   numbers for voice and text, so to put a single-number

15   solution in that would serve all customers takes more time

16   on their end, and my understanding is that there is some --

17   just as we faced uncertainty back in 1995, they are facing

18   uncertainty now in terms of how they implement their

19   solution given the fact that there's no real guidelines from

20   the FCC.

21           So that's the cause of delay.  But we are ready to

22   go on our end in the South now and expect to be ready to go

23   on our end in the North at the end of this year, early next

24   year.  And once the states and the other carriers are ready

25   to go, we can make the connection.

1          MR. VARMA:  Okay.  So, in other words, throughout

2     the Bell Atlantic region, north and south, it is your

3     assessment that from a technical and administrative and

4     operational point of view Bell Atlantic will be ready to

5     deploy 711 throughout the region by the end of this year.

6          MR. ELLIS:  The end of this year, early next year.

7     We can get their calls from the user to the relay center at

8     that point on.

9          MR. VARMA:  In other words, your end of the work

10    that needs to be done will have been completed by the end of

11    this year or early next year.

12         MR. ELLIS:  Yes.

13         MR. VARMA:  Of course, I realize that other things

14    have to come into place as well.

15         MR. ELLIS:  Yes.  That's correct.

16         MR. VARMA:  Rich, I was wondering if you could

17    also amplify for us, please, if in these 711 calls, based on

18    the Advanced Intelligent Network, does the person making the

19    711 call transmit his or her ANI?

20         MR. ELLIS:  Yes.  My understanding is that all of

21    the ANI information passes the relay center.  My

22    understanding was everything we get in a transitional 800

23    call would also go through in a 711 call.

24         MR. VARMA:  Okay.  So the TRS would receive the

25    ANI of the caller.

1          MR. ELLIS:  Yes.

2          MR. VARMA:  One final question.  There are a

3    couple of different types of technologies or approaches that

4    were, I believe, considered to provide 711, Advanced

5    Intelligent Network being one of them.  The other one I

6    believe I mentioned earlier is translations on a

7    switch-by-switch-by-switch basis.

8          I take it that you examined both of these

9    technical possibilities and compared their technical and

10   economic capabilities and conversations and then concluded

11   on that basis that the Advanced Intelligent Network was the

12   superior of the two.

13         MR. ELLIS:  Yes.

14         MR. VARMA:  Okay.  Thanks very much.

15         MR. WARD:  I just want to make a comment.  My name

16   is David Ward, and I'm with the Federal Communications

17   Commission, Network Systems Division.  I wanted to point out

18   to the state representatives that whether or not the state

19   selects a particular technology or the state's local

20   exchange carrier selects a particular technology, when the

21   customer dials 711 they will reach a telephone relay service

22   center.  The choice of technology, AIN, may have certain

23   cross-benefits over a switch-based technology, but both of

24   them will do the job.

25         MR. VARMA:  Dave, the switched-based technology,

1       is the AIN transmitted to the TRS?

2               MR. WARD:  Yes, sir.  The AIN and the switched

3       solution will both transport in-band signaling, which ANI

4       will include.  Common carrier signaling out of band is an

5       issue before the Commission one of our proceedings right

6       now.

7               MR. VARMA:  Thank you.

8               MS. NANKIN:  Kurt, do you have any questions?

9               MR. SCHROEDER:  Yes.  For, again, Rich Ellis or

10      anyone else who would like to jump in, Rich, you mentioned

11      that the cost per state, you estimated, was about $100,000,

12      which appeared quite reasonable to me, and I guess to you,

13      and the company since you're going to absorb it.

14              Now, you said that in states where you're ready,

15      are you, Bell Atlantic, are ready to implement technically

16      that in some cases the states and or the relay providers

17      need to do more to get ready.  What do you think, if

18      anything, is holding them back from taking those additional

19      steps that Maryland and Pennsylvania, I guess, we're looking

20      at Massachusetts doing that, too, are starting to take?

21              MR. ELLIS:  I think the question could probably be

22      better answered by the relay centers and the relay

23      providers.  My understanding is that it's just a matter of

24      certainty, of ensuring that if they do some work now, the

25      rules aren't going to change down the road and cause them to

1    undo things.  With the AIN platform we made an investment in

2    implementing 711, but it was a reasonable investment, and

3    our part of the transition is fairly straightforward.  It

4    gets a little bit more complicated at the other end of the

5    call, so there is a lot more certainty.

6            MR. BOSSI:  Kurt, that's a good question.  My name

7    is Burt Bossi.  I'm product manager for AT&T TRS, and I

8    wrote a few comments down regarding this issue this issue.

9    For TRS providers the cost of a switch-based, 711 solution

10   should be eligible, unless the provider differentiates its

11   user base through multiple toll-free numbers or the provider

12   makes their service available on a state-by-state basis

13   versus national.  That could also add costs.

14           If either were the case, the TRS provider would

15   have development costs associated with the engineering

16   changes, and that's necessary to differentiate their user

17   base with a single toll-free number, or the 711 translation,

18   without disadvantaging the answer time, which Mr. McClelland

19   mentioned earlier.  Some providers have originally decided

20   to service their user through multiple 800 numbers to get

21   the quickest connection time, data or voice.  We were using

22   the network, the multiple 800 numbers, to differentiate

23   these users.  With 711 the onus now becomes our

24   responsibility to differentiate.

25           So in summation, if a state currently supports

1    their user base with a single toll-free number, the TRS

2    provider is differentiating or separating with the voice or

3    data user after the call arrives at the TRS center. If the

4    state currently supports users with multiple toll-free

5    numbers, the user is being differentiates within the network

6    based on the dialed number. This allows the TRS center to

7    answer and service the user quicker and in the appropriate

8    mode. For TRS as it relates to AT&T and 711, the cost of

9    these changes currently are managed internally.

10    So as others mentioned today, there is a number of

11    elements that have to be changed in the network, in the

12    providers, and in the outreach of the users, the knowledge

13    base, to make the entire 711 work. When AT&T finishes its

14    data testing and it rolls its 711-ready system, it will roll

15    out nationally, and so all of our states will be ready

16    almost in a flash cut. We will not be rolling out state-by-

17    state.

18    MR. VARMA: Burt, the question that I have for you

19    is that some of the preflight comments that he have received

20    there is some discussion that we ought to consider the

21    dialing of fourth and fifth digits to further direct the

22    call in a certain manner. In other words, one could

23    possibly be two more digits after 711.

24    My question is that depending on whether a carrier

25    uses the Advanced Intelligent Network platform or

1     switch-by-switch translating, is it going to be equally

2     difficult for the callers to be able to dial the fourth or

3     the fifth digit, or is it easier one than the other?

4          MR. BOSSI: From a provider standpoint if the

5     network folks, the LECs involved, can do the difference of

6     users for us and deliver the voice customers to one number

7     and the data customers in another, it becomes much easier

8     for us. That's pretty much the summary.

9          The fourth and fifth digit, I don't think that's a

10    concern to the user, and if we study prior art from the

11    patent office, in 1995 there were three patents that had

12    originated related with 711 and a full dialing string of the

13    called party all as one number, where the network intercepts

14    711, sends the user to a relay provider, and then the relay

15    provider already has the 10-digit number to follow. So

16    there is prior art related to that from '96, I believe, '95

17    or '96.

18         We can do it either way. If the network doesn't

19    differentiate, we do. That's the bottom line. What we're

20    trying to do is minimize the amount of seconds it takes for

21    us to differentiate the customers because it becomes a task.

22    And to our users who are used to being answered quickly and

23    in the appropriate mode and in the appropriate protocol, it

24    will add somewhere between five and ten seconds.

25         MR. VARMA: Okay. Just to sum it up, then, as

1    best as you can assess, whether a carrier uses the advanced

2    technology network or switch-by-switch translation, it will

3    be possible for the network to accept the fourth and fifth

4    digit -- should that be the approach a state may adopt.

5              MR. BOSSI:  Yes.  I would agree.

6              MR. VARMA:  Thank you.

7              MS. NANKIN:  Kurt, do you have any more questions?

8              MR. SCHROEDER:  Yes, I do.  It's fair to say that

9    -- well, correct me if I'm wrong.  I guess it's fair to say

10   that cost really isn't an obstacle at this point to

11   implementing 711 in any state?  Anyone?  Paul?

12             MR. LUDWICK:  The point of view where the

13   recipient, I guess I would say cost, and the scope of

14   implementing 711, the cost to the relay provider is really

15   very insignificant compared to the cost of implementing it

16   in the network.  As Burt mentioned, calls to the relay are

17   presented when the customer dials 711, the local change

18   company or cellular company retranslates that number to an

19   800 number.

20             So for all intents and purposes, for the relay

21   provider it's simply establishes another 800 number or using

22   an existing one, which makes it simpler but less easy to

23   track, and doing the file maintenance and the implementation

24   detail that you would typical do at any time when you

25   implement that type of service -- testing, followup,

1   verification, that type of thing.  So from the

2   relay-provider point of view, the cost is relatively small.

3           MS. NANKIN:  Can I interrupt for one second?

4   Anyone that's speaking, please identify yourself before

5   going on.  Just give your name and state your affiliation.

6           MR. SCHROEDER:  Gil, I think you had a followup.

7           MR. BECKER:  My name is Gil Becker with the

8   Maryland Department of Budget and Management, responsible

9   for the Maryland Relay.  Rich mentioned that the cost was

10  something under $100,000 for the implementation, and getting

11  the technology work is great, but educating the users that

12  there is availability is important, too.  This afternoon

13  I'll be giving a little presentation on some of the outreach

14  efforts we've done, educating the public, and those costs

15  were close to $100,000 as well, to get the word out.  So

16  those costs need to be considered.

17          MR. SCHROEDER:  Yeah, I think, Gil, you've

18  anticipated my next question, which was if implementation

19  costs are not an obstacle, what other costs are there that

20  might create an issue for states that are still looking to

21  implement 711?  Yes.

22          MR. McCLELLAND:  Bill McClelland, with MCI

23  WorldCom.  To answer a couple of those questions, as far as

24  costs that aren't upfront, get-the-system-ready costs.

25  We've touched on -- Rich touched on just briefly and may

1    have missed that, and that's a thing that happens in the

2    system where we inadvertently drop the first digit dialed,

3    and we end up with a lot of misdialed numbers hitting the

4    platform, or we increase the amount of time it takes for the

5    setup of the call.  Both of those are incorrect costs to the

6    relay provider, in that it takes us more human power to

7    facilitate the same amount of relay time in a situation

8    where we have more misdialed numbers and longer connect

9    times in that area.

10            To your previous question about why Bell Atlantic

11   and -- because I brought up Massachusetts and that we're

12   working on it -- Bell Atlantic is not the only LEC provider

13   in the State of Massachusetts.  So coordination for when you

14   take a state to 711 has to be made across every LEC

15   provider, or you will have people dialing 711 and it's not

16   going anywhere.  So there's multiple LECs that are involved,

17   and so there is cost to each one of those LECs to do that

18   work.

19            MR. SCHROEDER:  Are you finding that there is any

20   resistance on the part of any of the LECs to -- is varying

21   those costs to make 711 a possibility?

22            MR. McCLELLAND:  This is Bill McClelland again.

23   We really haven't found any resistance to it, but the

24   coordination effort is yet to be determined.  Who is going

25   to do that?  Is it the state's responsibility to coordinator

1    711?   Is it the FCC's directive to implement 711?

2            Is it the relay provider's responsibility to

3    coordinator all of the LECs, because we have to be able to

4    receive whatever they dial us, and we have to tell them what

5    we want -- where we want it sent type of thing?   So there is

6    a vast amount of coordination effort when you start

7    including multiple LEC providers.

8            MR. WARD:   I wanted bring out another point

9    recommended to Yog's question to Burt earlier.   I think that

10   the answer given by burt to the direct question involves

11   other things that are before the Commission right now,

12   particularly concerning follow-on digits, abbreviated

13   dialing, and the ability of using a code, a routing code

14   like 711, to initiated a second dial tone or a tone that

15   will lift more digits dialed for additional routing.

16           I think that theoretically it's possible, but

17   implementation on a universal basis will create considerable

18   cost conversations by all carriers and switch manufacturers

19   that have not been addressed yet.   So I want everyone here

20   not to leave thinking that this is as clean as it sounds.

21   It was a direct answer to a direct question.   I'm not

22   disputing its veracity, but I think there are additional

23   issues that are before the Commission now that will come out

24   and identify all of the external issues.

25           MR. VARMA:   I have my own doubts as to how the

1    network would function, because it is quite possible that

2    after the switch receives the two digits, 711, that under

3    certain circumstances it may conclude that it has all of the

4    information that it needs to switch the call.  And,

5    therefore, it is possible that any additional digits that

6    you might dial after 711 may take you nowhere at all, and

7    those will be superfluous or digits that the network would

8    not need.

9    And I would invite anyone in the audience to be

10    able to share with us any thoughts on this issue of how the

11    network would operate when fourth and fifth digits are

12    dialed after 711.  Would the network accept them and report

13    that information to use, or would the information be

14    considered superfluous by the network and would not be of

15    any use at all?

16    I know, for example, that when people dial 911 the

17    call will go through right away.  The switch doesn't wait

18    there, expecting to receive more digits or something like

19    that.  Can anyone comment any further on this about the use

20    of the fourth or fifth digit after 711?

21    MS. NANKIN:  Rich, do you want to comment?

22    MR. ELLIS:  It's Rich Ellis from Bell Atlantic.  I

23    want to make a quick comment on Kurt's comment earlier.  I

24    want to caution that although the cost was less than

25    $100,000 for the AIN platform, I don't think you can

1    extrapolate that to a switch-based platform, and I'm not

2    ready to speak on that, but you might want to double-check

3    with some of the other carriers on that.

4              MR. WARD: Right. I think that's true. I think

5    that the fact that Bell Atlantic had a robust AIN platform

6    to begin with meant that some of the costs happens adopting

7    711 to it made it incrementally cheaper than as if they had

8    to invest in AIN in total before standing up 711. Here

9    again, if we have a state that has a lessrobust network or

10   has a local exchange carrier with one, then to go to

11   universal AIN platform in that state may be cost prohibitive

12   for certain carriers.

13             MS. SMITH: Three digit versus four-or five-digit.

14   With AIN we use what's called an --

15             MS. NANKIN: Excuse me for one second. Can you

16   first identify yourself?

17             MS. SMITH: I'm sorry. I'm Trish Smith with Bell

18   Atlantic, and I'm addressing the subject of the three-digit

19   versus four-or five-digit dialing for 711. With AIN we use

20   what's called the "N11 trigger." It's the same trigger

21   that's used for 911 or 311. So I believe that that would

22   mean we could only use three digits. And I could certainly

23   find out more, but I just wanted to caution that I don't

24   believe the AIN platform would support the four or five

25   digits. I'm not sure.

1          MR. LUDWICK:  Paul Ludwick for Sprint.  The reason

2     that the numbering plan in North America stays away from

3     area codes that are 911, 311, 511 are so that you don't have

4     to make a decision based on time or lack of digits.  You

5     make a decision based on what you receive, the N11, and the

6     call is placed.

7          MR. WARD:  Yes.  It's Dave Ward again from the

8     Network Systems Division, FCC.  We went through some of this

9     agony with the conversion from three-to four-digit carrier

10    identification codes, where in theory if the three-to-four-

11    digit conversion went too long, we would start having

12    dialing conflicts.  One of the ones we pointed out came from

13    a manufacturer where people calling Switzerland would wind

14    up getting Klamath Falls, Oregon.  So, I mean, it can get

15    very complicated, and that's why we are in a unique position

16    here to identify all of these problems so we come out with a

17    common ground that everyone can live with.

18          MS. NANKIN:  Kurt?

19          MR. SCHROEDER:  One last question.  This is our, I

20    think, first question that we received via the Internet from

21    a Mr. Jim Gorman.  I think we've addressed this at least in

22    part, but I wanted to raise it in case anyone had anything

23    else to add.  The question is, what is required of a TRS

24    provider to implement 711?  And I think he means via AIN in

25    Bell Atlantic territory.  Rich, do you have anything to add?

1          MR. ELLIS:  It's more a question for the relay

2     provider.  We deliver the call to the provider, and then

3     they that's how they understand it at their end.  So, Burt.

4          MR. BOSSI:  This is Burt Bossi with AT&T, as one

5     of the providers in Bell Atlantic territory.  Currently, we

6     receive our users through multiple numbers.  With 711, we

7     will receive all of the customers through a single number.

8     That differentiation is the cost for us.  Paul can speak to

9     this for Sprint, but they receive all of their users already

10     with one 800 number, so there is very little for them to do.

11     There's more things for providers that service their

12     customers with multiple 800 numbers.  That's pretty much it.

13          MR. SCHROEDER:  Paul or Bill McClelland, do you

14     have anything to add?

15          MR. McCLELLAND:  Bill McClelland with MCI.

16     Basically, Burt said it in a nutshell.  The difference is

17     going to be the impact to the customers, in effect that they

18     are used to being connected very quickly and the same way

19     every time by dialing that differentiating access number.

20     As soon as you compile all of the access numbers into a

21     single access, we increase the amount of time it takes to go

22     through and get them connected properly, and you impact the

23     user themselves.

24          If it's a voice user and you answer the call in

25     either ASCII or Baudot, they may think that they have a fax

1  line or a modem lines just hang up.  If it's a TTY user and

2  they are greeted in voice and in ASCII and then finally in

3  bar doe, you have to go through all of those series, and you

4  have to -- until they finally get down and get connected,

5  where if they were dialing the direct-access number, they

6  are connected immediately.  So there's those items.

7            MR. SCHROEDER:  Paul?

8            MR. LUDWICK:  Paul Ludwick.  Could you repeat the

9  question?

10            MR. SCHROEDER:  Yes.  It's required of a TRS

11  provider to implement 711.  I'm assuming he means via AIN in

12  Bell Atlantic territory.

13            MR. LUDWICK:  That's what I thought.  And I guess

14  it really depends on whether the relay provider uses

15  out-of-band signaling, which I typically equate with AIN

16  functionality.  I can tell you that Sprint does not at this

17  time.  We use in-band signaling, so if that's what Jim is

18  referring to, I would say that would be very difficult for

19  us to do.  I don't know about the rest of the folks here,

20  but we rely on our present relay platform uses in-band

21  signaling, so that would be the only way that we could

22  implement it.  And, again, we would simply implement it as a

23  recipient of information.

24            MS. NANKIN:  Thank you.  Are there any other

25  comments or views on the first question related to cost from

1  the audience or the panelists?  Sunny?  Please identify

2  yourself first.

3          SUNNY (through sign interpreter):  Yes.  My name

4  is Sunny, and I come from the Consumer Action Network, and I

5  have a question about the pricing.  We've been discussing

6  the cost in a single-vendor environment.  Now, suppose we

7  are in a multivendor environment.  Would the cost be the

8  same for that?

9          MS. NANKIN:  Would anyone like to take a shot at

10  answering this?  Okay.  Paul?

11          MR. LUDWICK:  Paul Ludwick with Sprint.  This is

12  based on a high-level, limited-dollar local network.  I

13  think the answer is, yes, it makes it substantially more

14  difficult and expensive to implement because at this time

15  I'm unaware of anyone that has any type of screening or call

16  routing other than point-to-point based on N11 coding.  I

17  guess what I'm saying is you would have to tie something

18  like a relay carrier preference to the customer's line when

19  711 is dialed, and I'm unaware of anybody that has done or

20  is doing anything in that area.

21          MR. ELLIS:  This is Rich Ellis from Bell Atlantic.

22  Just to agree with that, it would be incredibly expensive to

23  go back and program each individual caller preference.  It

24  would be a much higher cost than just borrowing one number

25  for all 711 calls to be directed to.

1          MS. NANKIN:  Burt Bossi?

2          MR. BOSSI:  Burt Bossi, AT&T.  I think the analogy

3     is as a user you are picked to a long-distance company, and

4     so the local network has a profile of you.  And what we're

5     talking about here is a dual pick or a triple pick to each

6     person's name.  Huge databases that have to be administered

7     first created.  So, yeah, expensive, very expensive.

8          MS. NANKIN:  Does anyone else from the audience

9     have a question or comments on this issue?

10         MR. WARREN:  Gary Warren from Hamilton Relay.

11         SUNNY:  I'm sorry.  I just wanted to add, I'm

12    understanding right now in California they have a multiple

13    vendor system.  Now, will 711 apply to that state, or how

14    will it apply to that state if they have that type of

15    system?  And will it cost too much?

16         MS. NANKIN:  William, do you want to answer that

17    question?

18         MR. McCLELLAND:  Bill McClelland with MCI World

19    com.  Since Paul jumped the first time, I'll take this one.

20    Sprint and MCI right multiple vendors, with other companies

21    looking to come into California today.  711 is being looked

22    at in California, and one of the initial solutions that they

23    are looking at is a state gateway, is the easiest way to

24    talk about it, is a state gateway that would, like one for

25    one provider, two for the next provider, three for that one,

1    but there is a lot of coordination effort in that

2    competition is good, but who gets to be number one, who gets

3    to be number two, who gets to be number three, so on and so

4    forth down the line there.  And all of that has not been

5    worked out yet.

6         That would take care of issues like pay phones and

7    common-use phones like PBXs and office systems and that type

8    of stuff.  Presubscription or preselection based at LEC is a

9    way to take care of someone at home that has a fixed ANI,

10   but, again, you're talking multiple picks for an individual

11   number, more databases, more expense in there.  It doesn't

12   take care of common use, so you're looking at either an

13   upfront gateway or an extended number of digits.

14        You were asking about the number of digits, the

15   fourth and fifth digits.  The switches can be programmed to

16   do a lot of different things.  If you went to a fourth and

17   fifth digit, you probably wouldn't put that behind the 711.

18   You would have to put it front of the 711, like

19   10-10-whatever, only it would be some other type of that

20   type of dialing, so that you didn't get cut off with the

21   711.  But it's not something that is in the system today;

22   it's something that would have to be decided upon and worked

23   upon industrywide and accepted as a standard and then built

24   into the switches.

25        So multivendoring in 711 is a very difficult

1    proposition, and it really has not been touched on hardly at

2    all.

3            MS. NANKIN:  Rich, do you have something to add?

4            MR. ELLIS:  I think that with any innovation of

5    this magnitude we have to be careful that we don't let the

6    perfect be the enemy of the good.  One of the key advantages

7    of 711 is it's three digits, easy to remember.  If we start

8    talking about four and five digits, then you add more

9    complexity in.  If we start talking about multivendoring

10   through 711, right off the bat, again that's more

11   complexity.  I think we need to remember that sometimes

12   there is an easy solution in the TTY itself for

13   speed-dialing arrangements.

14           So 711 is just one of the different things we

15   should be considering here.  I just want to be careful that

16   we don't get involved in all of these implementation issues,

17   and we spend as much time trying to find the perfect

18   solution to every single problem that we end up delaying the

19   entire implementation process.

20           MS. NANKIN:  There was one more question from the

21   audience on this issue, and then we are going to take our

22   break.

23           MR. WARREN:  Gary Warren from Hamilton Relay, and

24   maybe half observations and half questions.  I'm kind of

25   curious what people think.  One is, you look at a state like

1    Iowa or Nebraska or Minnesota, who has numerous -- Iowa has

2    100 telephone companies, local exchange companies.  And my

3    question is, do we think that if there was an AIN-type

4    solution, that would be at the tandem level, and, therefore,

5    that's maybe not as much an issue, or is it more likely in

6    those states that the switch translation solution to routing

7    711 would make it happen faster?  I think the latter is my

8    inclination.

9         A while back I went back to our own local switch

10   room, as our roots are a small telephone company, and said,

11   can you do this for me and translations a day later, yeah,

12   works.  But if we ask the same question many of those

13   companies in terms of an AIN solution, I think it would be a

14   much longer process and perhaps much more costly, something

15   to think about.

16        And the other question I have is the eventual

17   solution of routing 711 either AIN or with the switch

18   translation, does either solution bear on ultimately the

19   difficulty of passing the caller-ID-type class information,

20   and does that make a difference if we pursue either of those

21   two solutions, because I sense that the relay community is

22   going to down the road look for those things, and we need to

23   keep that in mind as we chart this path.

24             MS. NANKIN:  Does anyone have an answer?

25             MR. ELLIS:  This is Rich again.  Everyone is

1    pointing their fingers at me, so I guess I have all of the

2    answers.  My understanding is that the caller-ID-type

3    information gets passed on either platform.  The

4    switch-by-switch versus AIN question is something I really

5    can't answer because we are AIN based, but my understanding

6    is it's much more difficult and expensive to do it switch by

7    switch.  But if that's what you have, that's what you have.

8              MS. NANKIN:  Thank you.  Dave, do you want to

9    comment?

10              MR. WARD:  Yes.  Dave Ward of the Network Systems

11   Division.  I think it's important to understand that there

12   are two elements going on here.  The first one here is

13   internal to the local exchange carrier's network, and then

14   the other one is what information can be passed to expedite

15   the call handling between the local exchange carrier's

16   access tandem and the TRS center.

17              One of the issues that we are wrestling with here

18   is the definition of the common carrier.  Is a TRS center a

19   common carrier?  Right now, under our current

20   interpretation, they are not, so the TRS center has to build

21   the database without having the benefit of Signaling System

22   7, AIN platform kinds of information.  The database has to

23   be built manually, and then the ANI trigger from the in-band

24   signaling will be utilized by the TRS center for its own

25   locally maintained and built database.

1          So, in order to take advantage of the full

2   mechanization afforded by AIN, we have to revisit certain

3   things like definitions of common carriers and can a

4   local-exchange carrier transmit Signaling System 7

5   information so that the information can be transmitted on a

6   more mechanized level to speed up the time of TRS service.

7          MS. NANKIN:  Okay.  In a moment we'll take a

8   break, but I just want to let everyone know that we will

9   pick up where we're leaving off right now.  We will start on

10  the questions and comments on the carrier of choice, and

11  then we will take comments and questions on 711 access to

12  CMRS.  During the break, just for everyone's information,

13  restrooms are located -- there is a wall right behind this

14  room.

15         Right behind the wall are the restrooms, but you

16  have to walk around in order to get to them.  And if you

17  would like drinks or coffee or whatever, Ms. Kennedy, who is

18  standing in the back of the room with her hand up will be

19  able to lead you there, and we do have wheelchair

20  accessibility for anyone that needs that.  Thank you.  We'll

21  come back in 15 minutes -- 10 minute -- no, 15 minutes.

22         MS. NANKIN:  I would like to welcome you back to

23  the 711 Public Forum, and we are going to start the second

24  session, but first I would like to recognize into introduce

25  Commissioner Ness and thank her for coming.

1          COMMISSIONER NESS:  Thank you very much.  I just

2     wanted to come down and underscore my support for your very

3     hard work on implementing 711.  I see 711 as an extremely

4     important vehicle for people to communicate around the

5     country.  I am fortunate.  I live in Maryland where we now

6     have 711.  So we are seeing the benefits already, and I know

7     this is hard work.

8          It is detailed, it is complicated, but you are up

9     to the task, and you will help us to make sure that this

10     service is rolled out as quickly as possible so that

11     everyone can benefit from this service.  So I don't want to

12     keep you any longer from your important work, but I did want

13     you to know that I care very much about making this happen.

14     Thank you very much.

15          MS. NANKIN:  Thank you very much for coming and

16     showing your support.

17          In the second session we will cover the four

18     remaining topics.  If you look at the agenda in your

19     handouts, you can see the four topics.  The first topic will

20     be the Maryland Relay Center's choice of format to provide

21     711 access to TRS and the experiences of other states that

22     are implementing 711 access to TRS.  We will have two

23     speakers on this topic, Gil Becker, and then that will be

24     followed by Burt Bossi.  Hopefully, he will rejoin us by the

25     in time to give his presentation.  Gil, do you want to

1    start?

2         MR. BECKER:  Good afternoon.  My name is Gil

3    Becker.  I'm with the Maryland Department of Budget and

4    Management.  I'm responsible for administration of the

5    Maryland Relay, the fifth busiest telecommunications relay

6    service in the country.  The State of Maryland implemented

7    the 711 abbreviated dialing access to TRS in February of

8    1999.

9         First, I'd like to say how pleased we are with the

10   success of 711 access to TRS.  Customer acceptance has been

11   much greater than expected, and we couldn't be happier.  I'm

12   not saying the is system we have in place is perfect,

13   because we do still have a few issues to iron out, but

14   overall 711 addresses several outstanding concerns and it

15   truly brings relay one step closer to true functional

16   equivalency.

17        Prior to the implementation of 711 Maryland had

18   one primary number which handled 99 percent of all calls to

19   the Maryland Relay.  This number served all incoming

20   communication modes, including voice, TTY, VCO, and ASCII.

21   Two more numbers were established as additional services

22   were at the to the relay product line for the citizens of

23   Maryland.  One number was added to handle speech-to-speech

24   relay and the other to allow relay users to access 900

25   pay-per-call services and be build directly for those calls.

1           Having one primary number to access Maryland Relay

2    had many benefits.  However, there were some drawbacks.  The

3    system worked well except for those calls originating from a

4    PBX.  This existing system had what is known as a "customer

5    profile," also known as "branding" or "database record"

6    attached to the ante originating number.

7           The system remembers the last communication mode

8    used to call into the relay.  Voice callers dialing the

9    relay from a PBX were often frustrated by having to listen

10   to two series of high-pitched tones for the TTY or computer

11   for the last call handled by that PBX trunk.

12          This was one of the most common complaints

13   received by our office.  It was necessary to explain to the

14   voice caller the PBX issue and ask them to call the relay

15   again.  They were instructed that if they got tones, to wait

16   for an operator to answer in voice.

17          A similar situation occurred when accessing relay

18   to households with persons using multiple user nodes of

19   communication.  For example, if a TTY user in a household

20   was the last person to call the relay, then the next user in

21   that same household would get TTY tones, whether they were a

22   voice or a TTY user.

23          Two common complaints heard among TTY users are

24   failure to get a call back when they leave a message for

25   someone unfamiliar with relay and hangups in calling

1     businesses through the relay.  Often, new relay users are

2     intimidated or confused when they receive a message to call

3     their relay using an 11-digit number, and then you're to

4     give the operator another 10-digits number to dial.  Others

5     simply hang up when Maryland Relay calls, thinking it is

6     some sort of telemarketer.

7          One of the primary goals of our outreach effort

8     was to increase the public's awareness of the availability

9     of relay service.  Hopefully, the increased general

10    awareness would decrease hangups and encourage callbacks.  A

11    three-digit number not only highlights the importance of the

12    service, but it makes it easier to remember and more

13    effective as a marketing tool.

14         Bell Atlantic can better explain the technical

15    issue of how they set up abbreviated dialing, but basically

16    when a caller dials 711, that call affairs at the central

17    office, and it is directed toward an alternative, toll-free

18    number, which in turn is sent to the relay.

19         This conversion translation does seem so add a few

20    seconds to the time that it takes for a call to arrive at

21    the center.  The time that it takes a live operator to

22    receive a call at their workstation once it arrives at the

23    relay center is referred to as the "average speed of

24    answer."  These ASA times have remained consistent, at 2.9

25    to 3.0 seconds since the implementation of 711.

1          Calls directed to the 800 number assigned to 711

2     are handled differently than other calls coming into relay.

3     These calls are always answered in the voice mode first, and

4     there is no database lookup.  This solves the problem I

5     referred to earlier associated with PBX systems by ignoring

6     the last incoming mode of communication to the relay and

7     eliminating tones to the voice caller.

8          Unfortunately, setup solved one problem but

9     created another, since the call is answered in voice first

10    and branding and customer profile is ignored.  TTY, VCO, and

11    ASCII users using 711 must wait longer for the operator to

12    answer.  In addition, VCO users must always identify

13    themselves since branding is ignored.

14         To address the issue of longer answer-to-tech

15    times for VCO and ASCII, separate, dedicated, toll-free

16    numbers for these two access modes will be implemented

17    during the first quarter of the Year 2000.  Until this

18    alternative is established, we are suggested that callers

19    wishing to use the branding feature continue to use the

20    original toll-free number.

21         Now, the numbers are now in, and the results are

22    remarkable.  Voice-initiated calls are up an average of 20

23    percent a month since 711 was implemented seven months ago.

24    These new numbers are in comparison to the numbers of voice

25    calls initiated during the same month of 1998.  Data as well

1    as customer feedback tell us that voice callers have

2    increased dramatically. In addition, overall call volume is

3    up 10 percent since 711 began, this compared to several

4    years of only two to three percent growth.

5         On average, 44 percent of all callers accessing

6    relay are using 711. In fact, in July over 47 percent of

7    calls to Maryland Relay were entered through 711. We expect

8    these numbers to continue to grow.

9         Another benefit of 711 being answered in voice

10   first is that calls from the voice callers receiving tones

11   when calling the relay are now almost nonexistent.

12        I mentioned that the system isn't perfect. We

13   still do have some minor issues to work out. Because the

14   system always answers in voice first, it ignores branding.

15   We are encouraging VCO users or callers who wish to have

16   their calls answered faster in their preferred mode of

17   access to use the original 800 number. Bell Atlantic has

18   made both their pay phones and cellular phone service 711-

19   accessible. Bell Atlantic has been exempary.

20   Unfortunately, not everyone has been as responsive as Bell

21   Atlantic.

22        We have contacted both payphone providers and

23   cellular companies, requesting that they make their systems

24   accessible. However, since it's not yet an FCC requirement,

25   very few have complied. Thank you.

1          MS. NANKIN:  Thank you, Gil.  Burt Bossi, would

2     you like to speak on this topic?

3          MR. BOSSI:  The question, again, was?

4          MS. NANKIN:  Well, it's states' experiences with

5     implementing 711 access to TRS.

6          MR. BOSSI:  The reason that my name was brought up

7     for this topic was because AT&T TRS, as a provider, is doing

8     things slightly different.  I want the panel and the rest of

9     the folks in the audience to recognize that as we transition

10    from answering our user base from multiple 800 numbers or

11    multiple-access points to a single, it's going to look much

12    like the model of other providers, where we answer in voice

13    and then in the data protocols, and then rotate that to

14    voice, instead of separate voice, ASCII, Baudot per hookup.

15         So we talked about a slight time delay for the

16    data users because we're answering in voice first.  It

17    shouldn't be looked at as a negative for our system, because

18    what it does, it brings us to par with the systems that are

19    already answering in voice/data modes.

20         So what we're trying to do is create the best

21    application, the best solution to minimize that delay, and

22    we are using voice-response units.  We created something

23    called "upfront automation" and "back-end automation" two

24    years ago, and it got wonderful results from the data

25    customers, where they can center that they are an VCO

1    customer, their preferences, their call-forwarding number

2    all before they got to a CA.  The penalty for them was

3    approximately six seconds of time typing in these numbers.

4    The benefit was they got to their end party, they connected

5    to their far party 22 seconds quicker.  Okay?

6          So what looked like a penalty on the front end

7    turned out to be a wonderful time savings on the long side.

8    And at this point I would like everyone to think about that

9    average-speed-of-answer parameter that we continue to

10   measure, which is really an old parameter that we should

11   probably think about changing.  TRS providers shouldn't be

12   concerned with how quick they get to a CA.  They should be

13   concerned at how quick they get to their far party, and I

14   think that's the real issue.  That's a side note.  That's

15   all my comment.

16         MS. NANKIN:  Thank you very much.  The second

17   topic will be the methods to educate and provide technical

18   assistance to the public about 711 access to TRS, and

19   because this topic is so important, we actually have five

20   speakers on this topic:  Toni Dunne, Brenda Battat, Claude

21   Stout, Gil Becker, and Karen Strauss.  Tony, would you like

22   to start?

23         MS. DUNNE:  Thank you.  Good afternoon, FCC staff,

24   ladies and gentlemen.  My name is Tony Dunne, and I'm from

25   the Texas Commission on State Emergency Communications.  I